WINEGARD RoadTrip MINIMAX

Automatic Roof-Mounted Satellite TV Antenna

MADE IN U.S.A.

www.winegard.com/mobile
For Technical Services, email help@winegard.com or call 1-800-788-4417
For Receivers and Programming, call 1-866-609-9374
DO NOT RETURN ANTENNA TO PLACE OF PURCHASE.

For up-to-date information on receiver compatibility and programming, visit www.winegard.com/receivers

Product Registration

Please register your Winegard product by filling out and returning the Product Registration Card provided or by completing the online registration form at **http://www.winegard.com/registration**.

Specifications

- One button operation
- Supports up to two receivers
- Depending on receiver type and location, can access the following satellites:
  DISH® Western Arc:
  110°, 119°, 129°
  DISH Hybrid:
  110°, 119°, 61.5°
  DISH Eastern Arc:
  61.5°, 72°, 77°
  DIRECTV®:119° or 101° (will not receive HD on 110° or any KA-band HD on 99° and 103°)
  Bell TV™: 91° or 82°
- Gray plastic base
- Elevation range 20° to 92°
- Azimuth +360° (0-692°)
- UV-protected plastic dome
- Compact size
  20" diameter, 15.6" height
  Shipping size: 23" x 23" x 17¾"
- Specifications for max amperage: 5.0 A
- Specifications for unit operating voltage: 10.5–13.8 V
- Specifications for supply voltage: 12–13.8 V

Models

Tracking Models

RT8000T (white dome)
RTT-80W (white dome)
RT8035T (black dome)
RTT-80B (black dome)

Stationary Models

RT8000S (white dome)
RTS-80W (white dome)
RT8035S (black dome)
RTS-80B (black dome)

One dome and base with electronics, dish and dual LNBF are included with the MiniMax antenna. Aftermarket versions also include all mounting hardware and cabling required for a single receiver installation.

Safety Recommendations

Do not attempt to install this system in the rain or under any wet conditions. Moisture may affect electronics and void your warranty.

Do not paint this antenna. Painting the MiniMax antenna will void your warranty.

For best performance and to reduce signal acquisition time, park the vehicle on a level surface that is free of obstructions such as trees or large buildings. Make sure you have a clear view of the southern sky.

Trademarks

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Disclaimer

Although every effort has been made to ensure that the information in this manual is correct and complete, no company shall be held liable for any errors or omissions in this manual. Changes and technological advances are continuously being made in the satellite market. Information provided in this manual was accurate at time of printing. If the RoadTrip MiniMax antenna does not function as expected, please contact Winegard Company at 1-800-788-4417 or visit our website at www.winegard.com/mobile.

Unpacking the Unit

If using a knife to open carton, be careful. Do not cut the dome on the unit.

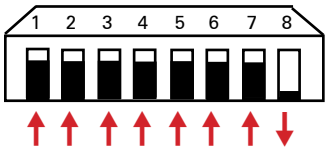
Use two people when removing the unit from the carton.

Open box, and remove packing material. Lift the unit out of the box vertically. Do not turn box and "roll" out the unit. Do not turn box upside-down to remove.

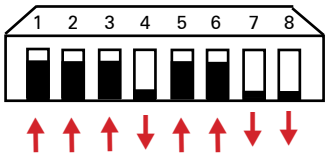
Quick Reference Guide

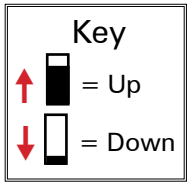
The MiniMax antenna switch settings are preset for DIRECTV. If you have a DISH or Bell TV receiver, you *must* change the numbered switches found on the electronics box under the dome.

DIRECTV

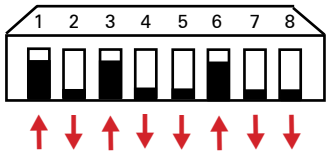


DISH

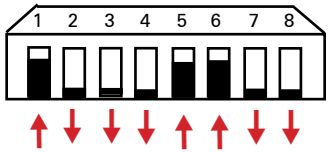




Bell TV



DISH Hybrid



Hybrid mode is for use in areas where the 129° satellite is not available and standard DISH settings fail to provide HD programming.

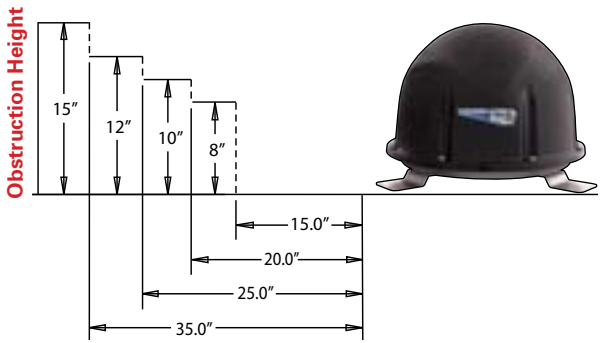
Installing Unit on Roof of Vehicle

Install in dry conditions only!

1. Select a level spot on your roof for installation. Level the base front-to-back and side-to-side. If the base is not level, the antenna may require more time to locate the correct satellite or may not locate the correct satellite.

2. Ensure proper distance to other rooftop equipment is maintained. Be sure no roof-mounted equipment is blocking the satellite "line of sight". See **Figure 1**.

Figure 1

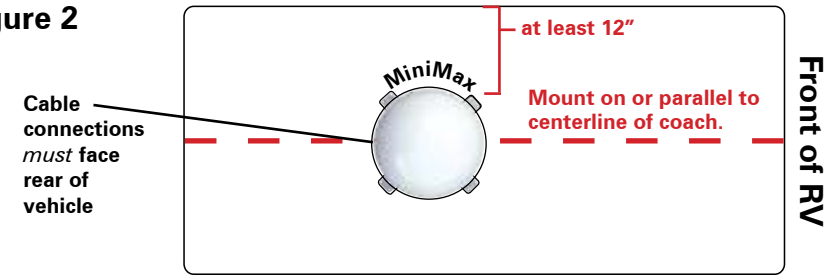


Minimum Distance to be Maintained from Antenna

Installing Unit on Roof of Vehicle, Cont.

3. After selecting a location for the unit, place the unit so that the centerline of the dome is on or parallel to the centerline of the vehicle. The centerline of the dome runs from the point between the two back feet where cable connections are located to the opposite point directly between the two front feet. Position base so that cables exit toward the rear of the vehicle.

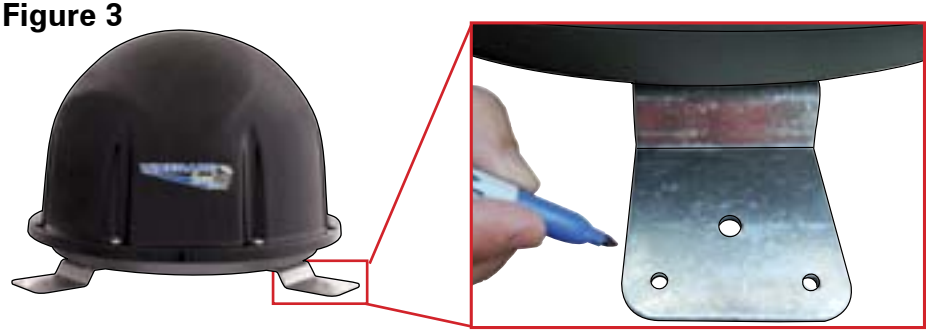
Figure 2



4. To ensure proper installation, check that the distance from the edge of the roof to the rear corner of any foot is at least 12″.

5. Place the unit on the roof in its permanent location, and mark around each base foot. See **Figure 3**.

Figure 3



6. Clean the roof area where the base feet will attach to the roof; do not erase your marks.

7. Put approved sealant in the areas marked for the base feet. Check with your vehicle manufacturer for approved sealant. Place the base feet on top of the sealant.

8. Before using the supplied mounting screws, check with your vehicle manufacturer for any special screw requirements. Screw down with three screws for each foot. After all base feet are secured to the roof, put sealant around the edge of feet and over screws.

Installing the Cables

1. Connect the quick disconnect power cable to the quick disconnect socket on the back of the RoadTrip MiniMax unit. See **Figure 4** below.

Figure 4

2. Decide the best location for the power and coax cables to enter the vehicle. Decide the location of the power switch and receiver. Drill a ¾" hole in the roof, and push the wires inside, making sure the cables are accessible from the area where the power switch and receiver will be located.

3. Using a coax cable, connect the primary receiver to the main port on the back of the RoadTrip MiniMax unit. For a two receiver or dual tuner (DVR) installation, connect a second coax cable (not provided) to the secondary port on the back of the RoadTrip MiniMax unit.

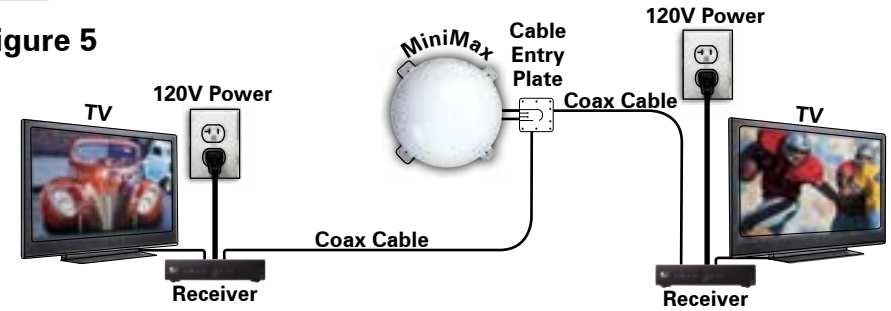
4. Place the provided cable entry plate over the hole and cables. Screw the plate in place. Seal the plate and screw holes with approved sealant (not included).

Depending on the length of the cable, you may need to use cable clamps or wire ties (not provided) between the unit and the cable entry plate. Clamping every 12–16" should eliminate any unnecessary cable movement.

Overall Installation

⚠ Nicks or cuts in wiring jacket may cause water to leak into vehicle.

Figure 5



Installing the Dome

Note: this is not required for DIRECTV Installation. This is only required if the dome has been removed to change the switch settings (see page 3).

1. Place the RoadTrip MiniMax dome over the unit so that the decals on the dome face away from the centerline of the vehicle.

2. Line up the holes in the dome with the holes in the RoadTrip MiniMax base.

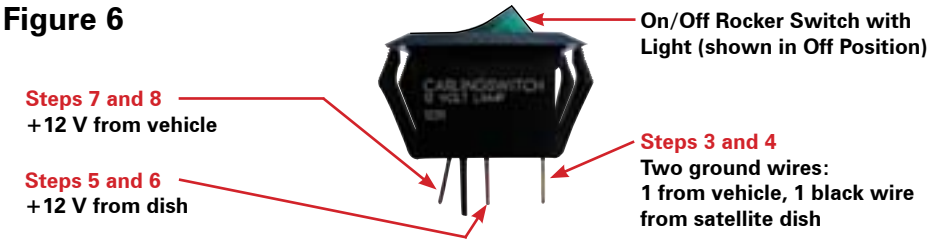
3. Insert all of the dome screws, and tighten.

Installing the Power Switch

1. Choose a location to install the RoadTrip MiniMax power On/Off switch. When selecting a location, remember that you will need to run the +12VDC power cable from the RoadTrip MiniMax antenna to the switch.

2. Be sure the switch is in the Off position before continuing. See Figure 6.

Figure 6


On/Off Rocker Switch with Light (shown in Off Position)
Steps 7 and 8
+12 V from vehicle
Steps 5 and 6
+12 V from dish
Steps 3 and 4
Two ground wires:
1 from vehicle, 1 black wire
from satellite dish

3. For a wall or panel mount, drill 1¼" hole, and pull wires through wall or panel. Using a large yellow flag connector, connect the ground wire from the vehicle and the black ground wire from the antenna.

4. Connect the yellow flag connector to the spade on the switch.

5. Connect the red wire from the antenna to the small red flag connector.

6. Connect the small red flag connector to the center spade on switch.

7. Connect the +12V power wire from the vehicle to a small red flag connector.

8. Connect a small red flag connector to isolated spade on switch.

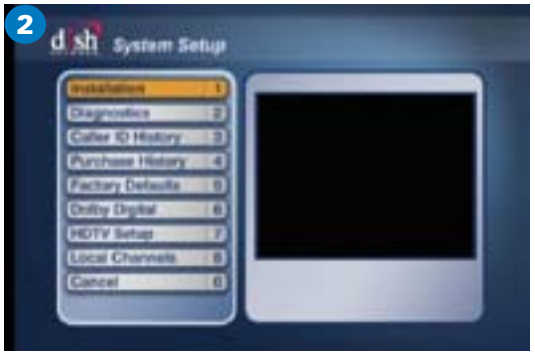
Continue to page 7 for DISH receiver setup or page 11 for DIRECTV receiver setup.

DISH Receiver Setup

Before turning the MiniMax antenna on, follow the steps below to clear out any existing receiver settings. If your receiver differs from the options shown, you may need to consult your receiver manual. The wording and display used in your receiver may differ slightly.

For help, email help@winegard.com or call 1-800-788-4417

Before starting, disconnect coax cable from "Sat In" on back of receiver. Press **Menu** on your remote. Select option 6, **System Setup**.



Select option 1, **Installation**.

Select option 1, **Point Dish**.

Disclaimer: Receiver setup instructions are accurate at time of printing and may change without notice. Call Winegard tech line for assistance: 1-800-788-4417.

DISH Receiver Setup

Move over to select **Check Switch**.

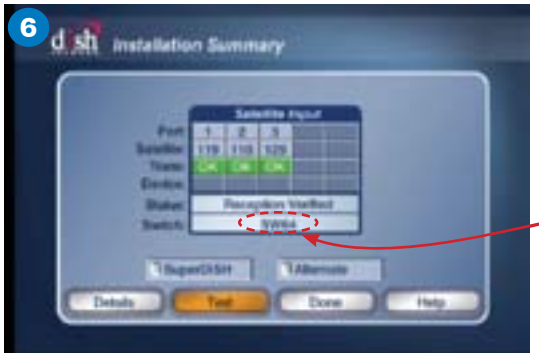
Select **Test**.

It will go through a number of steps, then return to the screen shown here with previous information cleared.

If at any point it asks you to save, select **Save** or **Yes**.

Reconnect the coaxial cable to the "Sat In" port on back of receiver. Now **turn on the antenna**. Allow it 3–4 minutes to acquire satellites.

(**If you have an In-Motion system,** after the search routine is complete the system will take another 6 minutes before going into "Sleep Mode". Once it does, the unit will be completely silent. **Do not proceed to Step 6 until this has happened.**)



Check that there are no checkmarks by SuperDISH or Alternate.

Next, select **Test** again.

This time it will install the SW64 switch. *This SW64 switch is a DISH receiver setting, not a physical part.*

When you see the SW64 as the installed switch, the antenna is ready for use.

Receiver Recommendations

The MiniMax antenna will operate with most DISH receivers. **Winegard does not recommend using receivers with hard drives not recommended by the manufacturer for mobile applications. Winegard recommends using a single tuner DISH receiver.**

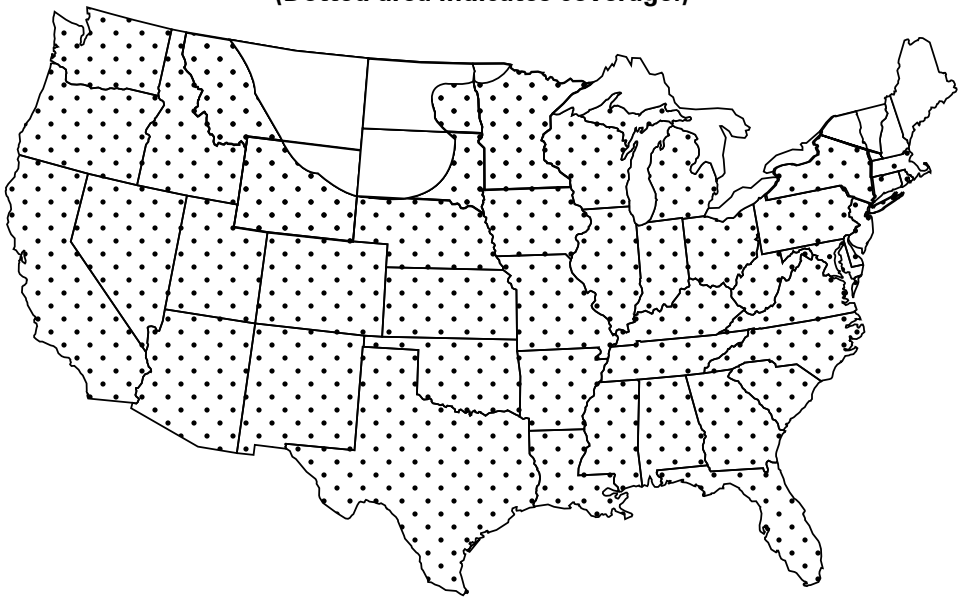
DISH Satellite Coverage

The antenna will locate and toggle between satellites 110°, 119° and 129° in Western Arc Mode. The MiniMax antenna will not operate in all areas where satellites 110°, 119° and 129° are available.

The antenna will locate and toggle between satellites 110°, 119° and 61.5° in Hybrid mode. The antenna will not operate in all areas where satellites 110°, 119° and 61.5° are available.

Satellite coverage maps are based on level, stationary operation. **Reception interruption may also occur during adverse weather conditions.**

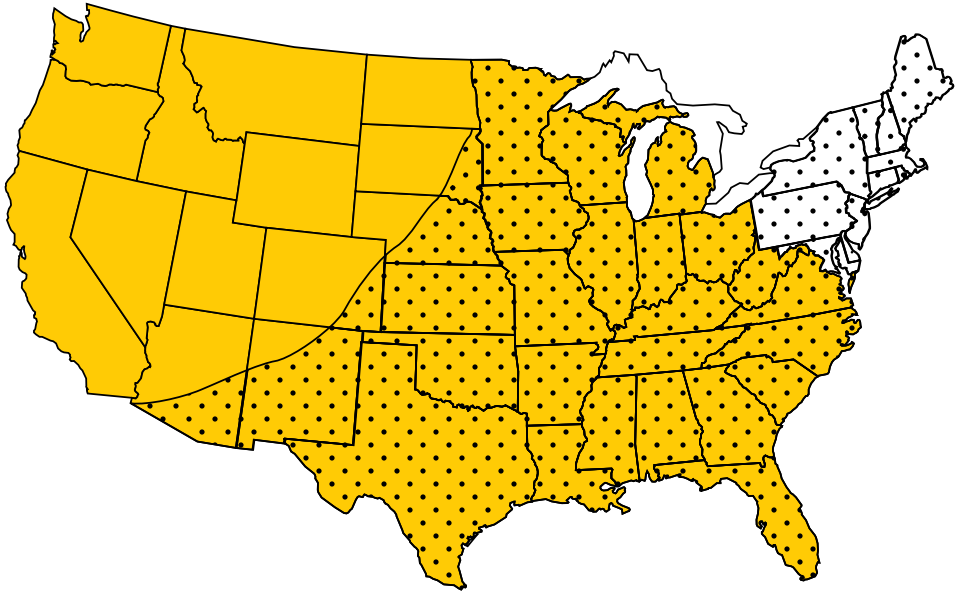
DISH satellites 110° & 119° coverage map
(Dotted area indicates coverage.)



Coverage maps are for reference only and do not guarantee coverage.

DISH Satellite Coverage, Cont.

DISH satellite 61.5° & 129° coverage map



DISH satellite 61.5°
MiniMax antenna coverage map

DISH satellite 129°
MiniMax antenna coverage map

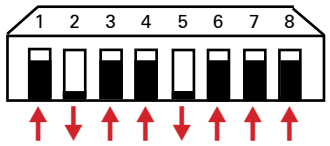
DISH Eastern Arc

Hybrid mode is for use with DISH in the Northeast where the 129° satellite is not available. If neither DISH Western Arc nor DISH Hybrid Mode will provide an HD signal, then the Eastern Arc may be used.

Please note that Eastern Arc is only an option for stationary models and is not compatible with in-motion models.

Consult the map above. If you are in the 61.5° coverage area, use the DISH Eastern Arc. See switch settings below.

DISH Eastern Arc

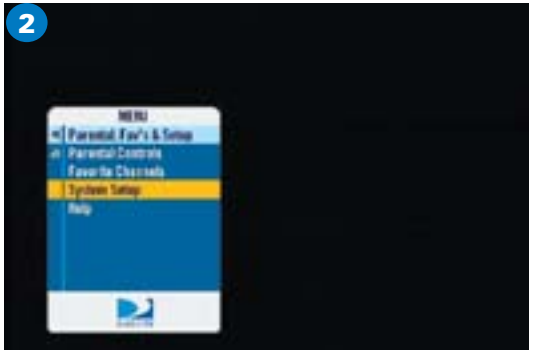


DIRECTV Receiver Setup

If your receiver differs from the options shown, you may need to consult your receiver manual. The wording and display used in your receiver may differ slightly.
For more information on receiver compatibility and programming, visit www.winegard.com/receivers.

For help, email help@winegard.com or call 1-800-788-4417

Press **Menu** on your remote, and then select **Parental, Fav's & Setup**.



Select **System Setup**.

In your receiver menu, you will need to identify the Satellite Menu. Once there, find the option for **Satellite Setup**.

Disclaimer: Receiver setup instructions are accurate at time of printing and may change without notice. Call Winegard tech line for assistance: 1-800-788-4417.

DIRECTV Receiver Setup

You may be required to press the **DASH (-)** before proceeding (underneath #7 on the remote).

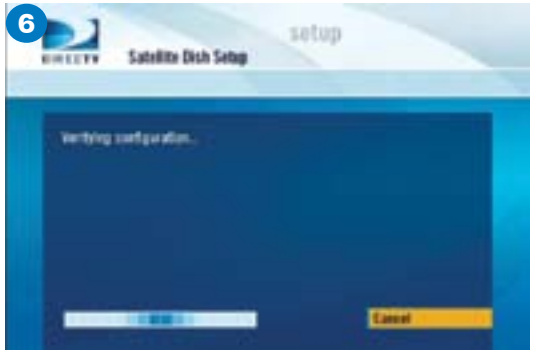
Select **3-LNB (18"x20")** or **3 Satellites**. If given the option of SWM or Multi-switch, select **Multiswitch**.

Now power on the MiniMax antenna, and allow it a few minutes to acquire signal.

(After the search routine is complete, **the in-motion antenna will take another 6 minutes before going into "Sleep Mode"**. Once it does, the unit will be completely silent.)

If you want to check signal strengths, choose **Signal Strength** from the menu options before returning to this screen.

Now, press **Continue**.



Your installation will be verified.

Continue with step 7 on the next page.

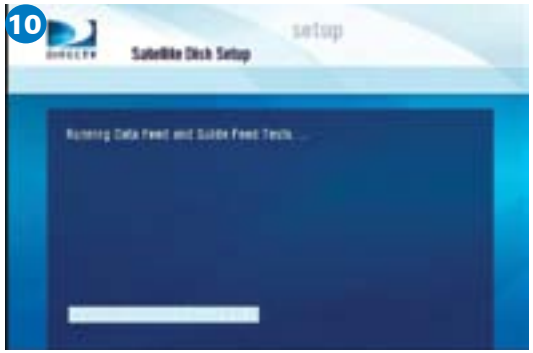
Errors may be displayed on the Installation Status screen. This is normal to see one or two boxes with an X instead of a ✓.

Select **Continue**.

Select **Continue**.

The program guide will download.

When the status bar reaches 100%, press **Continue**.



The receiver will run Data Feed and Guide Feed Tests for a few moments.

You will be prompted to set up the remote. Select **Setup Remote Later** to do this at a later time.

Select **Watch DIRECTV**.

Receiver Recommendations

The MiniMax antenna will operate with most DIRECTV receivers. **Winegard does not recommend using receivers with hard drives not recommended by the manufacturer for mobile applications.** Winegard does not recommend using an HD receiver since HD programming will not be available.

DIRECTV Satellite Coverage

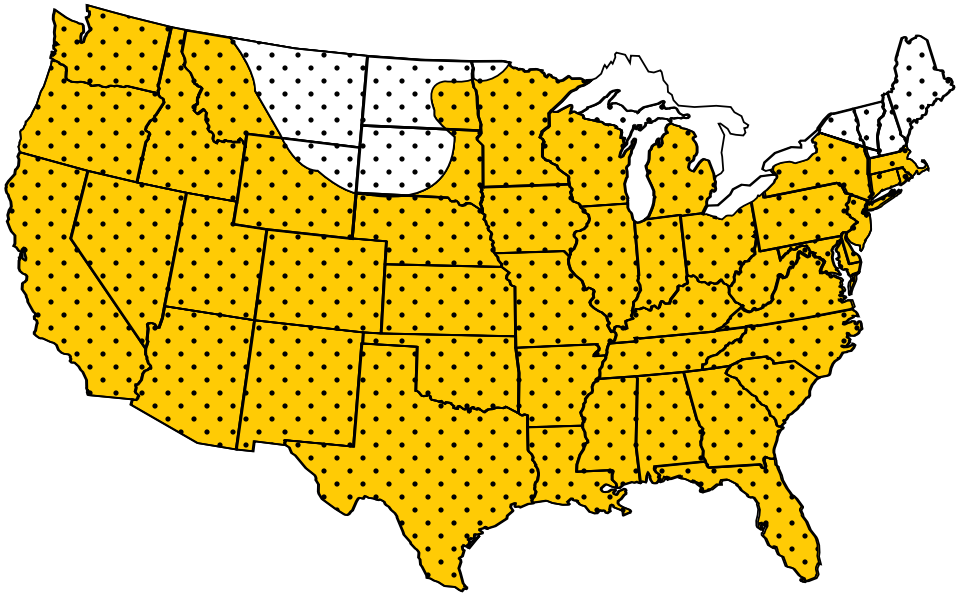
The antenna will locate and toggle between satellites 101° and 119°. The MiniMax antenna will not operate in all areas where satellites 101° and 119° are available.

The MiniMax antenna is not compatible with 110° or KA-band satellites 99° and 103°.

Refer to the figure below for an operational coverage map of satellite 101° and 119°.

Satellite coverage maps are based on level, stationary operation. **Reception interruption may also occur during adverse weather conditions.**

DIRECTV satellite 101° & 119° coverage map



DIRECTV satellite 101°
MiniMax antenna coverage map

DIRECTV satellite 119°
MiniMax antenna coverage map

Coverage maps are for reference only and do not guarantee coverage.

Operating the RoadTrip MiniMax Antenna

1. Turn on the receiver and television set. The RoadTrip antenna must be connected to a receiver plugged into 120VAC.
2. Verify that you are getting the receiver menu screens on the television. These screens are available with or without the dish finding the signal.
3. Turn the power switch on for the RoadTrip antenna. Within 10–15 seconds the dish will begin moving and should make one or two revolutions during startup. During this process, it is normal to hear a slight grinding sound as the unit checks its rotational limits. This does not harm the unit. A stationary system will now begin searching for satellites. An In-Motion system will pause to acquire GPS.
4. Once the dish begins its search, it pauses on signals long enough to determine which satellite it has found. If it moves off of the signal, it is an effort to verify the signal and should return shortly.
5. After an In-Motion system has verified the correct satellite, it will continue to track the signal. The In-Motion unit will go into “Sleep Mode” if the vehicle is stationary for six minutes. This involves a quick verification process where signal may be lost, then return to the signal and be silent.
   If the vehicle begins moving greater than 10 MPH, the In-Motion MiniMax antenna will resume tracking mode.

If you do not have signal, see “Troubleshooting” on page 17.

Note: there are certain areas within the U.S. where the RoadTrip MiniMax antenna may experience limited or no coverage of the 129° satellite for HD programming. DISH home coverage has the same limitations. Problem areas include Washington, Oregon and California, but limited coverage may extend past these areas. Contact DISH for additional coverage questions (888-825-2557).

Maintenance

The RoadTrip MiniMax antenna is designed to be maintenance free. However, it is a good idea to clean the dome from time to time with a soft cloth, water and dish soap.

Troubleshooting

Issue	Possible Cause
The antenna does not attempt to find a satellite, or it never moves.	Verify power source is providing +12VDC to the antenna. Ensure that the quick disconnect power connector is fully seated and locked into the quick disconnect socket.
The antenna continuously searches and eventually stops without ever acquiring any satellites.	Verify the main coax cable from the antenna is connected to the "Satellite In" port on the back of the receiver. Verify all coax cables are properly terminated and that there are no loose connections. Check to see if the southern sky is clear. Trees, buildings, large signs or an overpass can block the signal. Rain, snow, or excessive dew on the dome can interrupt the signal. Brush any snow or dew off of the dome. If heavy rain or snowfall is blocking the signal, it may be necessary to wait until the weather clears.
With DIRECTV, the dish will find the alternate satellite but not the primary satellite.	Make sure that the switches on the electronics control box are set for DIRECTV. See page 3. These switches are found on the electronics box under the dome.
I am not getting all of the DISH channels that I subscribed to.	Go to the Check Switch Menu on the receiver. Make sure it is set for SW64. Both even and odd transponders on satellite 110°, 119°, and 129° should be listed. Local programming may not be available outside of your local coverage area.
I have switched satellite service providers. How do I set my dish for my new provider?	Remove the dome, and set switches to correct provider. See switch settings on page 3.
My receiver appears to be locked up and is not responding.	DIRECTV users should reboot by *one* of the following methods: Press the red reset button on the inside of the small door on the receiver, OR unplug the receiver from AC outlet for 20 seconds, and plug back in. DISH users should reboot by *one* of the following methods: Press and hold the power button on the receiver for 15 seconds, and then release, OR unplug the receiver from AC outlet for 20 seconds, and plug back in.
The antenna appears to lock onto signal, but my receiver does not show a picture or signal reading.	Verify the switch settings are set correctly for the desired provider. See switch settings on page 3. DIRECTV users should verify the antenna type is set to either 3 LNB "18X20" or 2 LNB oval. DISH/Bell users should verify the "Check Switch" installed in the receiver; DISH users should verify this to be SW64, and Bell users should verify this to be SW42. Note: a new receiver will initially have an "Unknown Check Switch", but the antenna will still perform a search; however, it will not toggle to alternate satellites.

WINEGARD MOBILE PRODUCTS LIMITED WARRANTY
(2 YEARS PARTS; 1 YEAR LABOR)

Winegard Company warrants this product against defects in materials or workmanship for a period of two (2) years from the date of original purchase. During year one (1) of such warranty, Winegard Company will also pay authorized labor costs to an authorized Winegard dealer to repair or replace defective products. No warranty claim will be honored unless at the time the claim is made, Customer presents proof of purchase to an authorized Winegard dealer (to locate the nearest authorized Winegard dealer, contact Winegard Company, 3000 Kirkwood Street, Burlington, Iowa 52601, Telephone 800-288-8094 or visit www.winegard.com). Customer must provide proof of purchase with a dated sales receipt for the Winegard product to verify the product is under warranty. If the date of purchase cannot be verified, the warranty period shall be considered to begin thirty (30) days after the date of manufacture.

If a defect in material or workmanship is discovered, Customer may take the product to an authorized Winegard dealer for service. Customer must provide proof of purchase to verify the product is under warranty. If the product is brought to an authorized Winegard dealer for service prior to expiration of year one (1) of the warranty period and a defect in material or workmanship is verified by Winegard Technical Services, Winegard Company will cover the Winegard dealer's labor charges for warranty service. The Winegard dealer must contact Winegard Technical Services in advance for pre-approval of the service. Approval of the service is at the sole discretion of Winegard Company.

Alternatively, Customer may ship the product prepaid to Winegard Technical Services (located at 3111 Kirkwood Street, Burlington, Iowa 52601, Telephone 800-788-4417). Customer must return the product along with a brief description of the problem and provide Winegard Technical Services with Customer's name, address, and phone number. Customer must also provide proof of purchase to verify the product is under warranty. If the product is returned before the expiration of the warranty period, Winegard Company will (at its option) either repair or replace the product.

This Limited Warranty does not apply if the product has been damaged, deteriorates, malfunctions or fails from: improper installation, misuse, abuse, neglect, accident, tampering, modification of the product as originally manufactured by Winegard in any manner whatsoever, removing or defacing any serial number, usage not in accordance with product instructions or acts of nature such as damage caused by wind, lightning, ice or corrosive environments such as salt spray and acid rain. This Limited Warranty also does not apply if the product becomes unable to perform its' intended function in any way as a result of the television signal provider making any changes in technology or service.

RETURN AUTHORIZATION POLICY

A Return Material Authorization (RMA) is required prior to returning any product to Winegard Company or Winegard Warranty Services under this warranty policy. Please call our Technical Services Department at 800-788-4417 or send an e-mail to warranty@winegard.com to obtain the RMA number. Please furnish the date of purchase when requesting an RMA number. Enclose the product in a prepaid package and write the RMA number in large, clear letters on the outside of the package. To avoid confusion or misunderstanding, a shipment(s) without an RMA number(s) or an unauthorized return(s) will be refused and returned to Customer freight collect.

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This warranty gives Customer specific legal rights. Customer may also have other rights that may vary from state to state

SATELLITE RECEIVER WARRANTY

See manufacturer's limited warranty policy.

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